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THIS IS UNEVALUATED INFORMATION

SOURCE

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1. The Armed Forces Atomic Warfare Defense Manual (Nastavleniye o protivatomny zashchite voysk), classified top secret and received at the 287th Rifle Regiment in Austria about November 1953. See [redacted] had the following contents:

a. An introduction giving definitions of an atom, an atomic explosion, the use of atomic energy for war purposes, and similar basic information.

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b. This chapter was followed by another describing general characteristics of atomic weapons. It was stated that atomic weapons were atomic bombs and projectiles. [redacted] the term "projectiles" following the term "atomic bombs" was always put in parenthesis. The manual mentioned three types of atomic bombs according to their destructive power:

- (1) Small caliber atomic bombs with the destructive power of 20,000 tons of TNT.
- (2) Medium caliber atomic bombs with the destructive power of 50,000 tons of TNT.
- (3) Large caliber atomic bombs with the destructive power of 100,000 tons of TNT.

[redacted] these TNT equivalents are exactly those mentioned in the manual. [redacted] the manuals gave a comparison of relative fire power of atomic weapons and conventional artillery. [redacted] in addition to atomic bombs or projectiles of various types, the combat radioactive

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elements (Boyeverye radioaktivnyye veshchestva - BRV), emanating in the process of decomposition of the atoms, could be used in atomic warfare. [redacted] these elements could be used either independently or in combination with some other contaminants of chemical warfare for the purpose of contaminating areas, manpower, and equipment. ([redacted] whether the emanations of BRV were mentioned in the manual as effects of an atomic explosion, but they probably were.) [redacted] that the manual stated that BRV could be used either independently without an atomic explosion or combined with some type of chemical warfare. [redacted] the manual mentioned several specific combat radioactive elements which would or could be used, [redacted]

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c. And finally, atomic radiation or radioactive rays (radioaktivnoye oblucheniye) were mentioned as one of the destructive effects developed by the explosion of an atomic bomb. This radiation was described as consisting of special rays similar to X-rays (Rentgenovskiye luchy), having a very strong effect on the human organism.

2. The following characteristics of an atomic explosion were given by the manual:

- a. Intense bright light (yarkaya vspyshka).
- b. Loud rolling explosion (rezkiyraskatistyy zvuk).
- c. Black cloud of smoke in the form of a mushroom (chernyy gribovidnyy stvol dyma) several kilometers high (h = neskol'ko kilometrov).

3. Explosion of a small caliber atomic bomb results in the following:

- a. The destructive effect of the blast is spread at a speed of over 500 meters per second (s = boleye 500 metrov v sekundu). The speed, however, diminishes very rapidly after the first second following the explosion. Such a blast may be expected to cause the following damage:
 - (1) At 400 m. from the place of explosion tank cupolas will be blown away, concrete pill boxes ruined or leveled, and trenches, even those especially reinforced, will also be completely leveled.
 - (2) At 2,000 m. from the place of explosion, stone and brick buildings will be destroyed unless protected by natural barriers.
- b. High temperatures are developed at the explosion. At the place of explosion temperatures of several million degrees centigrade will occur. The high temperature, however, decreases rapidly from the point of explosion. No details were given by the manual. The bright light and high temperature developing at the explosion may cause the following damage:
 - (1) Close to the place of explosion the intense bright light may cause complete blindness.
 - (2) Parts of the human body unprotected by clothing could receive severe burns.
 - (3) Wooden structures and trees would be set on fire or charred at a distance up to 800 m. from the point of explosion.

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4. [] the manual gave effects only for small caliber bombs. No effects for the medium and large size bombs were given by the manual. Consequently, the effects of the three different caliber bombs were not compared in any way in the manual, except as to TNT equivalents.
5. [] manual included any charts, drawings or figures on areas of destruction. [] there were several graphs illustrating the maximum safe dose for human beings of alpha, beta, and gamma rays in the Atomic Warfare Medical Treatment and Deactivation Manual [].
6. Following the description of the destructive effects of atomic weapons, the manual stated that defense against atomic weapons was possible and required adoption of the following measures:
- Prevention of use of atomic weapons by the enemy. [] remember, the manual stressed use of fighter planes and AAA for destruction of enemy bombers carrying atomic weapons. [] remember whether guided missiles were mentioned in the manual as one of the destructive means in this respect. [] heard that such missiles existed and that they would be used for this purpose [].
 - Establishment of a standard, general alarm signal giving notice of atomic danger, and the immediate transmittal of such an alarm by the use of all available communication means. The responsibility for giving such an alarm was placed on the army or army group (front) headquarters according to the manual. The manual did not designate any specific signal as a warning of expected atomic attack. [] regiment it was established that the air raid alarm (given by siren) was at the same time to be considered an alarm for an atomic raid.
 - Organization of atomic reconnaissance (radiatsionnoy razvedki) by all armed branches. This reconnaissance was to be carried out by special detachments whose personnel had been trained for this service and equipped with devices for atomic reconnaissance. In this connection the manual mentioned the following devices:
 - Indicator (Indikator) to detect BRV in a certain area, to determine the extent of this area and existing uncontaminated passages, if any. No description of an indicator was given by the manual.
 - Alphameter (Al'fometr).
 - Betameter (Betametr).
 - Gammameter (Gammametr).

[] the atomic warfare manuals did not give designations for the various devices used for atomic reconnaissance. The alphameter, betameter, and gammameter were to be used to determine the existence and concentration of various radioactive rays in a certain area. No other details were given by the manual, []. The mission of atomic reconnaissance, as stated in the manual, was to determine the presence of BRV in a certain area and to transmit this information immediately to the troops. Further, the atomic reconnaissance detachments were to determine the BRV concentration, to establish the size of affected zones and mark their boundaries with visible markings, also to locate and indicate the shortest passages, if any,

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through affected zones. [redacted] exactly what type markings were to be used by the reconnaissance units for indicating BRV contaminated areas or passages through such areas. However, there was an attachment to the Medical Treatment and Deactivation Manual showing these markings. [redacted] some of them were in the form of squares, triangles, and arrows; they were of various colors (mostly red) and there were inscriptions on each of them. [redacted] which shape markings or which color markings indicated a higher or lower degree of contamination. No further information

7. [redacted] no information on official designation and/or organization or the atomic reconnaissance units. [redacted] no exact information as to whether personnel and equipment for these reconnaissance units were already available. [redacted]

[redacted] not know who was to be responsible for the training and organization of atomic reconnaissance units. [redacted] the troop units would receive specially trained officers and that these tasks would not be allocated to the chemical warfare regimental officers, since they were not qualified. [redacted] information as to what units the reconnaissance units were to be assigned or under whose control (service or command level) they were to be placed.

8. The safety measures recommended by the manual after an atomic attack were chemical warfare protective clothing and gas masks (The 287th Rifle Regiment was equipped with gas masks, model Professor Academician Zelinskiy, which were referred to as Voyskovoy protivogaz professora, akademika Zelinskogo), which had to be put on immediately. The manual also instructed that closest cover should be taken or, if there was no cover, one should lie down prone. [redacted] information as to what measures were to be taken to protect personnel and maintain combat efficiency following subjection to an atomic attack.

9. [redacted] as to what measures were to be taken to protect and maintain communications centers and channels.

10. [redacted] as to what measures were to be taken to safeguard command posts and headquarters and to re-establish control of units following atomic attacks.

11. [redacted] whether the manuals recommended use of smaller ground units.

12. The Armed Forces Atomic Warfare Defense Manual also ordered modifications of tactical doctrines which would be necessary in the event of atomic warfare. [redacted] about tactical and strategic doctrines of the Soviet Army, but [redacted] of the instructions in this atomic warfare manual, there was a definite tendency in the Soviet army to get away from mass troop concentrations for offensive and defensive actions. The modifications of tactical doctrines, [redacted] were as follows:

- a. Larger attack and defense zones were assigned to tactical units in order to avoid excessive casualties inflicted by atomic weapons. No specific norms for the extension of unit areas in combat were given by the manual.
- b. Under conditions of atomic warfare the first attacking echelon was to be composed solely of tank and mechanized units, with only very limited participation, if any, of the infantry, in order not

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to expose the infantry to atomic casualties. The manual stressed the need for great mobility of units in order to reduce to a minimum the time in which troops passing through an affected zone would be exposed to radiation.

- c. In case of an atomic attack by the Soviets, troops occupying forward positions, i.e., the first three lines of trenches (battalion reserves included) were to be moved three to five kilometers to the rear in order to protect them from the harmful effects of our own atomic weapons. However, in order to protect these three lines of trenches against a surprise enemy attack, the manual envisaged small detachments that were well-organized and protected against atomic effects being left in the forward positions with the task of holding them for Soviet units which would return to them. [] the atomic warfare manual specified the time which these units were to return, in other words, whether it stated the time after which it would be safe for these units to return to the area which might have been affected by atomic weapons.
- d. Since prior to the start of an atomic attack by the enemy, the enemy would have to evacuate his forward positions and move the bulk of his first line units three to five kilometers to the rear, the manual advised the use of this period for our own attack and possession of unprotected enemy positions.
- e. The units assigned for an attack under atomic warfare conditions were to advance toward the enemy in marching columns protected by advance detachments. The marching units were to deploy for combat only after the advance detachments met with organized resistance from the enemy (organizovannoye soprotivleniye protivnika). Chemical warfare protective clothing was to be worn by troops while advancing toward the enemy.
- f. [] whether the manual emphasized decentralization or command. [] there were quite a number of references, probably in several of the manuals, stressing the necessity for encouragement, promotion, and development of initiative of commanders on all levels as a definite requirement of atomic warfare.
- g. And finally, the manual recommended full use of our own atomic weapons as a countermeasure against enemy atomic warfare.
13. With regard to information given by the manual on changed tactics (concentration and role of support units such as artillery, supply, transportation, etc.), [] there were several references in the manuals [] that large troop concentrations, under conditions of atomic warfare, were to be avoided. [] one manual gave rules for the use and role of supporting units such as artillery, supply, transportation, [] read these chapters. [] read of any changes being made in the strength and organization of units in view of atomic warfare.
14. [] the manuals contained any information on the planned tactical redistribution of forces, such as an increase of reserve forces with a corresponding decrease in force in the front lines, except [] larger fronts being assigned to individual units.

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15. [redacted] any of the manuals giving any modified tactical doctrines on locations and sizes of staging areas, location of supply areas and dumps, river crossings, beachheads and amphibious operations, operations in or near populated areas and cities, or troop movements. [redacted] the manual stating that the effects of atomic warfare are considerably smaller in mountainous terrain and that forests represent dangerous areas because fire can be easily started by atomic weapons. [redacted] there was a statement to the effect that atmospheric precipitation such as rain and snow as well as dampness in the air served as deactivators and reduced the period of contamination of an area affected by radioactive elements. At the same time, 50X1 it said that water as such, once contaminated by radioactive means, would hold this contamination for a long time. This applied especially to large bodies of water such as rivers, lakes, etc. [redacted] exactly not understand this part of the manual well [redacted] exactly how it was expressed. 50X1

16. Great emphasis was placed on fire protective and fire extinguishing services as protection against atomic warfare casualties. In this respect the manual envisaged:

- a. Organization of fire-fighting details within troop units. The manual did not elaborate on this point and did not mention the units within which such details were to be organized.
- b. Providing troops with sufficient quantities of fire-fighting equipment.
- c. Cutting clearings through the forests and removal of dead wood (valezchnik) in order to prevent the spreading of fire.
- d. Preparation of ploughed strips in brushy and open areas.
- e. Removal of all inflammable materials in troop concentration zones.

17. As precautions which were to be taken to protect personnel, supplies, and equipment from damage and contamination by an atomic attack by the enemy, the manual mentioned that individual rations had to be wrapped in several sheets of special paper, and guns and equipment had to be dug in and covered with some kind of roofing. There were also instructions in regard to protective measures for large stocks of equipment and warehouses; [redacted] 50X1

18. [redacted]

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